

AMENDMENT TO THE DRAWINGS

Please amend Figure 1 to change reference number “30” designating the power cord to reference number “31.” The replacement drawing for Figure 1, as amended, accompanies this amendment.

REMARKS

The Specification has been amended on pages 6; 8; and 12 to correct discrepancies between it and the drawings. The Specification on page 17 has been amended to remove reference to the collection of air bubbles in the higher gravity position of the well by "gravity." Figure 1 has been amended to change reference number "30" designating the power cord to reference number "31." The replacement drawing for Figure 1, as amended, accompanies this amendment.

It is believed these amendments overcome the objection to the Specification and Drawings, as well as the rejections based upon 35 U.S.C. § 112.

Claims 1; 3; 4; 8; 12; 13; 18; and 21 have been amended. Claims 14 to have been cancelled. Claims 11 and 28 were cancelled previously.

Claims 1 to 10; 12; 13; and 18 to 27 remain in the application. Of these, claim 1 is the sole independent system claim, and claim 18 is the sole independent method claim.

Independent system claim 1 and method claim 18 have been amended to define an ultrasound application comprising a transducer housed within a housing body. The transducer has a transducer face. A stand-off region is spaced outward from and encircles the entire periphery of the transducer face for a set distance below the gravity plane of the transducer face. The stand-off region prevents direct contact between the transducer face and the skin region through which ultrasound energy is applied. A flexible material overlays the stand-off region. The flexible material defines a bladder chamber between the flexible material and the transducer face. The flexible material defines an acoustic contact area contacting and conforming to the skin region. An acoustic coupling media liquid is confined within the bladder chamber. A well region extends outward about the entire periphery of the transducer face between the transducer face and the stand-off at a position above the gravity plane, to collect away from the transducer face, and without discharge from the bladder chamber, air bubbles forming in the acoustic coupling media liquid, to minimize localized skin surface heating effect.

The claims stand rejected under 35 U.S.C. § 103 based upon Talish et al (US 6,432,070) in view of Peterson et al (US 6,126,619); Winder et al (US 5,520,612); and Meyers (US 5,531,119).

Talish does not teach or suggest a stand-off region that is spaced outward from and encircles the entire periphery of a transducer face for a set distance below the gravity plane of the transducer face, to prevent direct contact between the transducer face and the skin region through which ultrasound energy is applied. Talish also does not teach or suggest a flexible material that overlays the stand-off region to form a bladder chamber between the flexible material and the transducer face. Furthermore, Talish does not teach or suggest a well region that extends outward about the entire periphery of the transducer face between the transducer face and the stand-off at a position above the gravity plane, to collect away from the transducer face, and without discharge from the bladder chamber, air bubbles forming in the acoustic coupling media liquid, to minimize localized skin surface heating effect. There is absolutely nothing in Talish that teaches, suggest, or contemplates the collection of air bubbles, much less providing a specific structure, as defined in the amended claims, that collects air bubble away from the transducer face and without discharge from the bladder chamber, for that purpose. The collection air bubbles is also of no concern to Winder, because Winder does not use a liquid acoustic coupling media.

Peterson does not teach or suggest a stand-off region that is spaced outward from and encircles the entire periphery of a transducer face for a set distance below the gravity plane of the transducer face, to prevent direct contact between the transducer face and the skin region through which ultrasound energy is applied. Peterson also does not teach or suggest a well region that extends outward about the entire periphery of the transducer face between the transducer face and the stand-off at a position above the gravity plane, to collect away from the transducer face, and without discharge from the bladder chamber, air bubbles forming in the acoustic coupling media liquid. Peterson directs air bubbles directly into transducer face for discharge outside the bladder chamber.

Meyers does not teach or suggest a stand-off region that is overlaid by a flexible material that defines an acoustic contact area contacting and conforming to the skin region. Meyers also does not teach or suggest a well region that extends outward about the entire periphery of the transducer face between the transducer face and the stand-off at a position above the gravity plane, to collect

away from the transducer face, and without discharge from the bladder chamber. Meyer directs air bubbles for discharge outside the bladder chamber.

There is nothing in the combination of the four documents that fairly leads to the combination of technical features defined in the amended claims. Neither the principal reference Talish or the tertiary reference Winder contemplate air bubble removal in any respect. Neither Peterson nor Meyers teach or suggest air bubble removal that is both away from the transducer face and does not require discharge of bubble from the bladder chamber. The well region defined in the amended claims makes possible air bubble collection away from the transducer face in a small, ergonomic geometry, without requiring the added complexity and components for discharging air from the bladder chamber, as the vent paths through the transducer face in Peterson and the convoluted interior funnel paths in Meyers.

Applicant notes that an Information Disclosure Statement submitted 1 May 2006 (copy attached) has not been acknowledged by the Examiner.

Claims 1 to 10; 12; 13; and 18 to 27 are believed to be in condition for allowance.

Respectfully Submitted,

By

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